

Balance Civil, Interior and Allied Works for Petronet LNG Limited Office Building Complex at Dwarka, Sector-14, New Delhi

IBMS I/O SUMMARY

Sr. No.	Function	Qty	AI	DI	AO	DO	SI	Monitor	Control	Alarm	By BMS provider
A	VRV SYSTEM										
i	VRV Main Controller Monitoring / Soft Integration consist maximum upto 128 Indoor Units & 16 Outdoor Units						x	*			Integrator Unit / Software mapping of all the parameters from VRV Main controller (for Total 4000 Soft Points)
B	UPS Room Equipment	2									
i	PAC on / off command					2			*		Relay output @ 2 amp, 230 V & wiring from PAC MCC
ii	PAC FAN status			2				*		*	Diff. Pressure Switch - Air & field wiring
iii	Supply air temperature monitoring		2					*	*		Duct mount temp sensor & field wiring
iv	PAC Panel Monitoring / Soft Integration						x	*			Integrator Unit / Software Connectivity(100 Points)
v	UPS Room & Server Room Temperature & RH Sensor						2	*		*	Networkable Space type Wall Mount BACnet Compatible Communicable Temp & RH Sensor
vi	Water Leak Detection						x	*		*	Integrator Unit / Software Connectivity(300 Points)
vii	Gas Based Fire Suppression						x	*			Integrator Unit / Software Connectivity(300 Points)
	Sub Total for VRV & PAC		2	2	0	2	2	0	0	0	
C	TFA	2									
i	TFA on / off command					4			*		Relay output @ 2 amp, 230 V & wiring from TFA MCC

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ii	TFA auto manual status			4				*		*	Wiring from TFA MCC
iii	TFA Filter status			4				*		*	Diff. Pressure Switch across filter & field wiring
iv	TFA Trip Status			4				*		*	Wiring from TFA MCC
v	TFA Humidity monitoring		4					*			Duct mount Humidity sensor & field wiring
vi	TFA air temperature monitoring		4	12		4					Duct mount temp sensor & field wiring
Sub Total for TFA			8	24	0	8	0	0	0	0	
D	VENTILLATION SYSTEM										
1	Lift / Stairs Pressurization Fan (8 Nos)	8									
i	Normal mode Fan auto manual status			8				*		*	Wiring from Fan MCC
ii	Fan Air Flow status			8				*			Diff. Pressure Switch across fan & field wiring
2	Exhaust Fans (6 Nos)	6									
i	Smoke Exhaust Fan auto manual status			6				*		*	Wiring from Fan MCC
ii	Smoke Exhaust Fan Air Flow status			6				*			Diff. Pressure Switch across fan & field wiring
3	Fresh Air Fans Fans (6 Nos)	6									
i	Fresh Air Fan on / off command					6			*		Relay output @ 2 amp, 230 V & wiring from Fan MCC
ii	Fresh Air Fan auto manual status			6				*		*	Wiring from Fan MCC

Sr. No.	Function	Qty	AI	DI	AO	DO	SI	Monitor	Control	Alarm	By BMS provider
F	Domestic / Raw Water Pump	6									
i	Pump on / off command					6			*		Relay output @ 2 amp, 230 V and wiring from MCC
ii	Pump auto manual status			6				*		*	Wiring from MCC
iii	Pump run Status			6							Current relay & Wiring
iv	Pump trip Status			6				*		*	Wiring from MCC
v	Ungerground / Overhead Tank Water level monitoring low/High (9 Nos)			18				*			Level Switch & field wiring
	Sub Total for Plumbing & Fire Fighting		4	56	0	6	0	0	0	0	
G	ELECTRICAL SYSTEM										
1	HT PANEL										
i	HT Main Incomming Breaker Status			1				*			Wiring from DDC to Potential free contact
ii	HT Main Outgoing Breaker Status			3				*			Wiring from DDC to Potential free contact
iii	Trip Alarm			1						*	Wiring from DDC to Potential free contact
iv	Over current Alarm			1						*	Wiring from DDC to Potential free contact
v	Earth Fault Alarm			1						*	Wiring from DDC to Potential free contact
vi	Over voltage Alarm			1						*	Wiring from DDC to Potential free contact
vii	Under Voltage Alarm			1						*	Wiring from DDC to Potential free contact

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viii	Relay Status			40						*	Wiring from DDC to Potential free contact
2	LT Pane										
i	Incomming Breaker Status			7				*		*	Wiring from DDC to Potential free contact
ii	Outgoing Breaker Status			38				*		*	Wiring from DDC to Potential free contact
iii	Incoming ACBs (energy analyser) software integration						x	*		*	Integrator Unit / Software Connectivity & Harwired Connectivity (Total 200 Soft Points)
3	Transformer	2									
i	Transformer On/Off Status			2				*		*	Wiring from DDC to Potential free contact
ii	ACB Trip Status			2				*		*	Wiring from DDC to Potential free contact
4	DG SYSTEM	3									
i	DG microprocessor (software) integration for DG -intrinsic parameter monitoring						x	*		*	INTEGRATOR UNIT / Software connectivity (Total 300 Soft Points)
H	UPS Panel Mapping										
i	UPS Panel Monitoring / Soft Integration (For 4 Nos.) on RS-485 / Modbus						x	*		*	INTEGRATOR UNIT / Software connectivity (Total 300 Soft Points)
I	STP Panel Mapping										
i	STP Panel Monitoring / Soft Integration						x	*		*	INTEGRATOR UNIT / Software connectivity (Total 200 Soft Points)

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J	WTP Mapping										
i	WTP Panel Monitoring / Soft Integration						x	*		*	INTEGRATOR UNIT / Software connectivity (Total 200 Soft Points)
K	Energy Meter										
i	Energy Meter Monitoring / Soft Integration (For 43 Nos)						x	*		*	INTEGRATOR UNIT / Software connectivity (Total 800 Soft Points)
L	Elevator System	6									
i	Lift alarm connectivity			6				*		*	Wiring from Lift panel (Separate for all towers)
ii	Lift trip status			6				*		*	Wiring from Lift panel (Separate for all towers)
iii	Lift Panel Monitoring / Soft Integration						x	*		*	Integrator Unit / Software Connectivity & Harwired Connectivity (Total 500 points)
M	Fire Alarm System										
i	Fire Detection System (For 248 Nos.)						x	*		*	INTEGRATOR UNIT / Software connectivity (Total 1000 Soft Points)
N	Air curtain										
i	Air curtain (For 6 Nos.)						x	*		*	INTEGRATOR UNIT / Software connectivity (Total 500 Soft Points)

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O	Solar Panel											
i	Solar panel (For 2 Nos.)						x	*		*	INTEGRATOR UNIT / Software connectivity (Total 500 Soft Points)	
P	External Lighting											
i	External Lighting On/Off Status			3							Wiring from DDC to Potential free contact	
								*		*		
	SSUB Total - Other Services		0	113	0	0	0					
	GRAND TOTAL		14	219	0	22	2					
	GRAND TOTAL WITH 10% SPARE DATA POINTS		283									